## REMARKS

Applicants request favorable reconsideration and withdrawal of the rejections set forth in the Office Action in view of the foregoing amendments and the following remarks.

Claims 1-5, 7, 8, and 10-15 remain pending in the application, with claims 1 and 13 being independent. Claims 1, 5, and 13 have been amended herein. Claims 14-18 have been newly added. Support for the amendments and newly added claims can be found throughout the originally-filed disclosure, including, for example, at paragraphs 0011, 0040, and 0045. Applicants submit that the amendments do not include new matter.

Section 101 Rejection

Claim 13 is rejected in the Office Action under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Specifically, the Office Action asserts that "a method claim would not qualify as a statutory process would be a claim that recited purely mental steps." Office Action, p. 4. The Office Action also asserts that "to qualify as a 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied..." Id.

Applicants respectfully traverse the rejection. Nevertheless, in order to expedite prosecution, independent claim 13 has been amended to clarify the statutory subject matter of the invention. Specifically, claim 13 now recites executing an executable program stored on a computer readable storage medium. Applicant submits that claim 13, as amended, now positively recites the physical object to which it is tied. As such, Applicants submit that the claim now clearly recites statutory subject matter, and thus, the Section 101 rejection has been overcome and should be withdrawn.

Section 112 Rejection

Claims 1-5, 7, 8, and 10-13 are rejected in the Office Action under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Specifically, the Office Action asserts that the originally-filed disclosure does not include a written description of the feature that the audit component is configured to "assign a negative weight for a particular series of unsuccessful transactions by an identity associated with [the] account that exceeds a sum of individual negative weights of unsuccessful transactions that make up the particular series of unsuccessful transactions by [the] identify associated with [the] account," as recited in claim 1. The Office Action further asserts that the originally-filed disclosure does not include a written description of a step of "assigning a negative weight for a particular series of unsuccessful confirmations of the relationships between [the] user identity with [the] account that is greater than a sum of individual negative weights of unsuccessful confirmations of the relationships that make up the particular series of unsuccessful confirmations of the relationships between [the] user identity with [the] account," as recited in claim 13.

Applicants respectfully traverse the Section 112 rejection, and submit that the originally-filed disclosure includes a written description of the features cited in the rejection. Nevertheless, in order to expedite prosecution, independent claims 1 and 13 have been amended to recite "an aggregate of individual negative weights of unsuccessful confirmations of the relationships that make up the particular series of unsuccessful confirmations of the relationships between said user identity with said account." (Emphasis added). Applicants submit that the

originally-filed disclosure fully supports this recitation, for example, in Paragraphs 0011, 0040,

and 0045. For instance, Paragraph 0011 recites:

> In addition, <u>each transaction performed under the user identity is aggregated</u>. Positive weighting can be assigned to successful transactions that are indicative of an ownership of the underlying account, while negative weighting can be assigned to unsuccessful transactions. Thereafter, the weightings can be analyzed to verify that the user identity is being used by the true owner of the underlying account.

(Emphasis added).

Additionally, Paragraph 0040 reads:

> <u>Additionally</u>, certain interactions may be weighted in aggregate form. In other words, some combinations of events may have relationships with each other. <u>For example, a series of identity-undermining events may have an aggregate negative weighting that exceeds the individual negative weightings described above.</u> Aggregated behaviors may also include usage behaviors that can be captured as patterns using, for example, conventional pattern matching algorithms. Each usage can be compared to a typical usage pattern. Typical usage may include the typical tasks performed by the user, the location of the user when accessing the system electronically (which may be determined, for example, via the IP address or addresses from which they typically connect), and usage of the underlying account. For example, if the account is being used in multiple cities hours apart, a sign of fraud may be present. This pattern data may be updated at regular intervals. For example, each time the user accesses the system, a similarity score can be computed that indicates the similarity of the transaction to previous transactions. Therefore, each usage of the system establishes a usage history for the user. Thus, previous usage can be logged and compared to each subsequent usage.

(Emphasis added).

Thus, the originally-filed disclosure describes a first embodiment where each transaction (event) is aggregated for a final result value. The disclosure describes weightings assigned to each event. Then, the disclosure further describes an additional embodiment where events are weighted in aggregate form instead of individually. The disclosure further supports this additional embodiment by providing an example where a series of negative events may have an aggregate negative weighting that exceeds the individual negative weightings "described above". Since the negative weightings described earlier refer to weightings for individual negative events which are then aggregated into a final result value, the disclosure is clearly referring to a comparison between an aggregate negative weighting for a series of negative events and an aggregate negative weighting of the negative events considered individually (i.e. occurring separately). Therefore, the originally-filed disclosure fully and clearly supports the claimed feature of assigning a negative weight for a particular series of unsuccessful transactions by an identity associated with said account that exceeds an aggregate of individual negative weights of unsuccessful transactions that make up the particular series of unsuccessful transactions by said identity associated with said account.

As such, Applicants submit that claims 1 and 13, as amended, now satisfy the written description requirement under Section 112. Dependent claims 2-5, 7, 8, and 10-12 now also satisfy the written description requirement under Section 112. Thus, the Section 112 rejection has been overcome and should be withdrawn.

Section 103 Rejections

Claims 1-5, 7, 8, and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bansal et al. (U.S. Patent Application Pub. No. 2003/0120593) in view of Candella et al. (U.S. Patent Application Pub. No. 2005/0021476) and Perfit et al. (U.S. Patent No. 6,535,728)

Applicants respectfully traverse the rejection and submit that the claims are patentably distinguishable from the cited references for at least the reasons set forth.

The Office Action cites Bansal et al. as disclosing a registration component, an ownership component, an audit component, and a servicing component. The Office Action acknowledges, however, that Bansal et al. does not disclose or suggest determining a usage history of said identity based on at least one transaction deemed a successful or unsuccessful confirmation of the relationship between said identity and an account, and assigning a positive or negative weight for a successful and unsuccessful transaction, respectively, and aggregating the positive and negative weights to determine the likelihood a claimed identity is the owner of the account.

In order to cure this deficiency, the Office Action cites Candella et al. as disclosing the assigning of positive or negative weights for successful and unsuccessful transactions, and aggregating the positive and negative weights to determine the likelihood a claimed identity is the owner of the account. The Office Action contends that it would have been obvious to modify Bansal et al. by the teachings of Candella et al., in order to "assist the system in 'determining the risk that a person, such as a purchase 20 seeking to buy a product or service, purchase a ticket or

enter a location 21, is not who they claim to be'... [and] 'to determine the probability that the purchaser is using another purchaser's identity in a fraudulent manner." Office Action, pp. 8-9.

The Office Action further acknowledges, however, that Bansal et al. still does not disclose or suggest assigning a negative weight for a particular series of unsuccessful transactions by an identity associated with said account that exceeds a sum of individual negative weights of unsuccessful transactions that make up the particular series of unsuccessful transactions by said identity associated with said account.

In order to cure this additional deficiency, the Office Action cites Perfit et al. as disclosing data records, where elements of each event are fields within a database record of a subscriber. The Office Action asserts that Perfit et al. discloses an ID associated with the record and each event including a weight or score, where the alert score is the sum of a primary score of events, and an investigation queue of open investigations is maintained which includes each subscriber/account having an alert score meeting or exceeding the alert threshold, and that alerts that are identified by Subscribers' Ids are represented as unsuccessful transactions. The Office Action contends that based on the teachings of Perfit et al., it would have been obvious to modify Bansal et al. to assign a negative weight for a particular series of unsuccessful transactions by an identity associated with said account that exceeds a sum of individual negative weights of unsuccessful transactions that make up the particular series of unsuccessful transactions by said identity associated with said account, in order to "enable the system to protect subscriber database records by executing programs to examine changes to account information received

from the provisioning loader over the data network for fraud risks and further examine data... to detect possible fraud (Perfit, col. 5, lines 40-55)." Office Action, pp. 9-10.

Applicants submit, however, that <u>Perfit et al.</u> fails to disclose "assigning a negative weight for a particular series of unsuccessful transactions by an identity associated with said account that exceeds an aggregate of individual negative weights of unsuccessful transactions that make up the particular series of unsuccessful transactions by said identity associated with said account" as recited in amended claim 1.

This feature of claim 1 provides a more sophisticated weighing algorithm over other art, whereby some combinations of events can have relationships with each other. The feature emphasizes the more serious concern when a series of events occurs, and elevates the seriousness in comparison to each event in the series occurring separately. For instance, if the system determines that a user has failed all of 1) an attempt to enter in a user id/password (value of "-1 point"), 2) an attempt at biometric identification (value of "-1 point"), and 3) an input for the user's mother's maiden name (value of "-1 point"), then the system may conclude that a more serious breach of identity has occurred. Instead of a traditional method of aggregating each failed identification attempt (which would result in a total of -3 points), the system may weigh the "entire picture" and assign a value of, for example, -10 points for the combination of the three failed attempts. By assigning a negative weight (-10 in the above example) for a particular series of unsuccessful transactions that exceeds an aggregate (-3 in the above example) of individual negative weights of unsuccessful transactions, the system can more accurately consider the

seriousness of multiple failed identification attempts and more accurately track the usage behaviors of identity thieves.

In contrast, <u>Perfit et al.</u> merely discloses an event manager generating "fraud" events, with each event including a weight that represents a numerical value, a half-life that represents the rate at which the weight diminishes, and a match quality that represents a degree of correspondence between the subscriber and a subscriber having a known history of fraud. <u>Perfit et al.</u>, col. 7, lines 54-65, col. 8, lines 4-10. However, <u>Perfit et al.</u> is completely silent regarding aggregating a series of events such that an aggregated negative weight for the series is greater than the aggregated negative value when each event is considered individually. In other words, <u>Perfit et al.</u> fails to disclose or suggest elevating the seriousness when a series of negative events occurs, as opposed to the events occurring separately.

As such, Applicants submit that <u>Bansal et al.</u>, <u>Candella et al.</u>, and <u>Perfit et al.</u>, whether considered individually or in combination, all fail to disclose or suggest "assigning a negative weight for a particular series of unsuccessful transactions by an identity associated with said account that exceeds an aggregate of individual negative weights of unsuccessful transactions that make up the particular series of unsuccessful transactions by said identity associated with said account" as recited in amended claim 1, and thus, the Section 103 rejection has been overcome and should be withdrawn.

Claims 2-5, 7, 8, and 10-12 in the present application are dependent claims that depend directly or indirectly from independent claim 1, and are, therefore, patentable over the cited references, for at least the reasons noted above. In addition, each of these claims recite

features of the invention still further distinguishing it from the cited references. Favorable and independent consideration thereof is respectfully sought.

Additionally, claims 2-4 appear to be rejected at least partially on an additional reference, Benson. Applicants submit that the rejection of claims 2-4 is improper as it relies on evidence outside the scope of the set of references asserted as the basis of the rejection.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Candella et al., in view of French et al. (US Patent Application Pub. No. 2003/0033526) and Perfit et al.

The Office Action relies on Perfit et al. in substantially the same manner as the rejection of claim 1, to cure the deficiencies of Candella et al. and French et al. which fail to disclose or suggest "assigning a negative weight for a particular series of unsuccessful confirmations of the relationships between said user identity with said account that is greater than an aggregate of individual negative weights of unsuccessful confirmations of the relationships that make up the particular series of unsuccessful confirmations of the relationships between said user identity with said account."

For the same reasons as stated above for claim 1, Applicants submit that Perfit et al. also fails to disclose such a feature, and merely discloses an event manager generating "fraud" events, with each event including a weight that represents a numerical value, a half-life that represents the rate at which the weight diminishes, and a match quality that represents a degree of correspondence between the subscriber and a subscriber having a known history of fraud. Perfit et al., col. 7, lines 54-65, col. 8, lines 4-10.

As such, Applicants submit that <u>Candella et al.</u>, <u>French et al.</u>, and <u>Perfit et al.</u>, whether considered individually or in combination, all fail to disclose or suggest "assigning a negative weight for a particular series of unsuccessful confirmations of the relationships between said user identity with said account that is greater than an aggregate of individual negative weights of unsuccessful confirmations of the relationships that make up the particular series of unsuccessful confirmations of the relationships between said user identity with said account" as recited in amended claim 13, and thus, the Section 103 rejection has been overcome and should be withdrawn.

Applicants further submit that newly added claims 14-18 recite additional features that are not disclosed or suggested in any of the cited references.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and passage to issue of the present application.

Any fee required in connection with this paper should be charged to Deposit Account No. 06-1205.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

/Donald H. Heckenberg, Jr./

Donald H. Heckenberg, Jr.
Attorney for Applicants
Registration No. 60,081

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200
DHH/SKY/ntb

FCHS_WS 3482428v1

- 18 -